

Application Hosting Services



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Agenda

- Current Environment
- Application Hosting Services Future
- Summary

Scope

- Application hosting environments
 - Enterprise server
 - Web Infrastructure
 - Scientific computing

Current Environment

Enterprise Server

- Customer base
 - 10,000 registered users Agency-wide
 - More than 500 application systems & subsystems
 - Financial Systems are largest customers
- Hardware - IBM Generation 6 CMOS X37

Current Environment

Enterprise Server (*continued*)

- Software

- Operating System - OS 390 used currently (Z/OS on order)

- Software products

- ▶ 150 3rd party and 96 IBM products

- ▶ 30 vendors

- Environments supported

- ▶ OS/390 UNIX Systems Services

- ▶ NT

- ▶ LINUX

- Database Products

- ▶ Adabase, DB2, and Oracle

- Disaster Recovery

- Subscription service for application owners

- Only 5 Mission critical ES applications currently subscribe

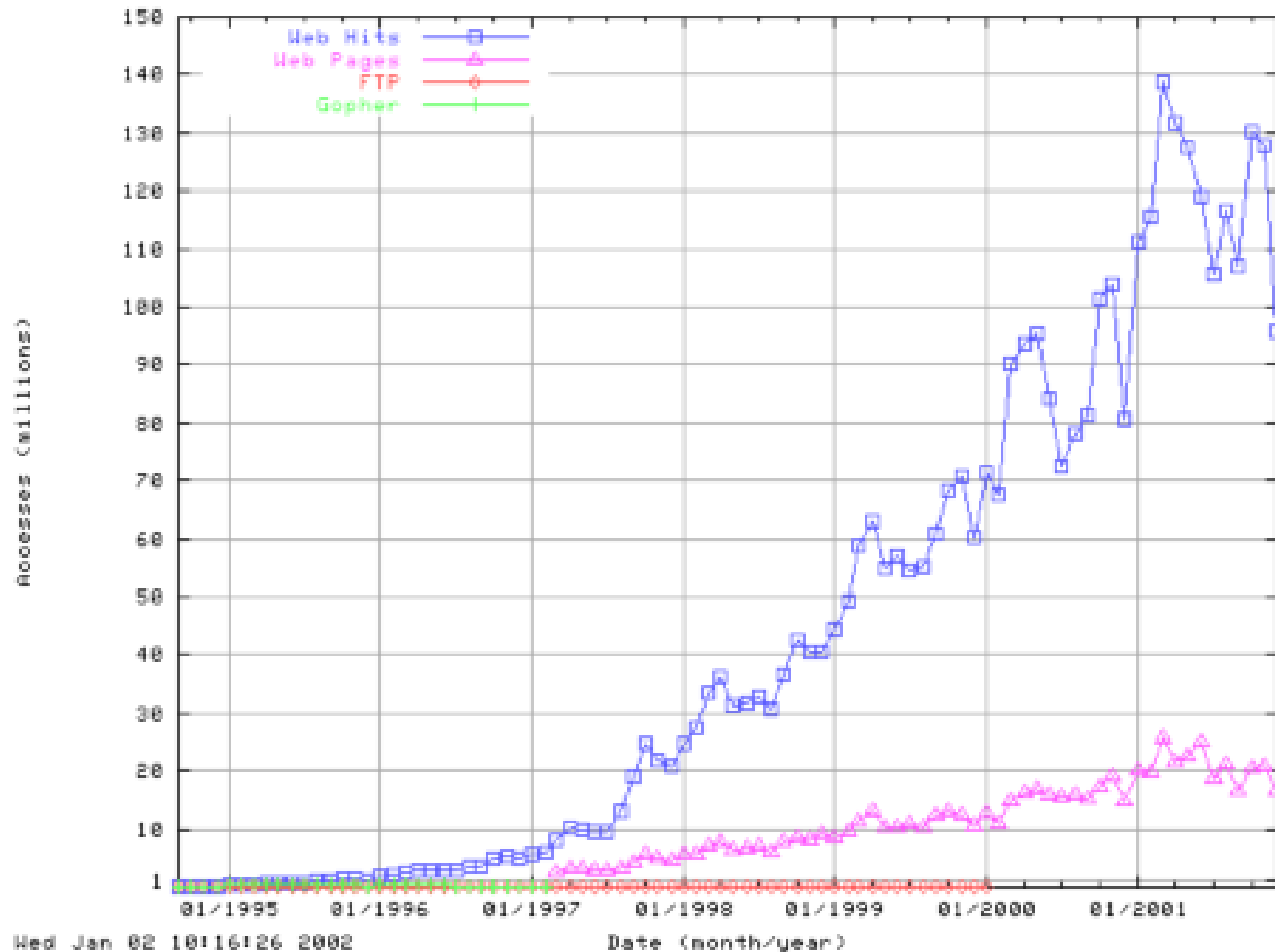
Web Infrastructure

- Supports major mission critical systems
- Hosts the EPA Public Access Website (www.epa.gov)
 - Often ranked in the top ten in independent reviews of e-Government sites
- Hosts search.epa.gov and intranet.epa.gov
- Operating Systems
 - Compaq Tru64 Unix
 - Sun Solaris
 - IBM AIX
 - Windows NT

Current Environment

Web Infrastructure

- Server hits and page transfers since inception (1995-2001)



Current Environment

Web Infrastructure

- Web Infrastructure: 1995-2001
 - 1995 - Science Project
 - 1996 - The journey begins - services structured to encourage web use
 - Content volume and presentation techniques evolve rapidly
 - Public races to AOL, CompuServ, Prodigy, Mindspring, etc., - "Hey Dude, your getting a Dell."
- Web Infrastructure: 2002
 - Encouragement no longer needed
 - ▶ 60-75 applications in the pipeline
 - Complex set of services
 - ▶ Some predictable, some not
 - ▶ Some easy to understand, some not
 - ▶ Difficult to compare to commercial model

Current Environment

Web Infrastructure

- Web Infrastructure: 2002 (*continued*)
 - ▶ Complex environments
 - ▶ Focus on service delivery vs. customer solutions
 - ▶ Lack of focus on big picture due to overwhelming service delivery details
 - ▶ More sophisticated customers and public
 - ▶ Security, security, security
 - ▶ NTSD evolution to application hosting services

Current Environment

Web Development Environments

- Over 400 applications under management
 - Most customer applications cross three or more environments
- Oracle databases and Application Server Applications
- Lotus Domino Applications
- ColdFusion Applications
- Mapping Applications
 - ESRI and ARC/IMS
- Other software tools and products

Current Environment

Oracle

- Over 100 Oracle databases
 - 4 Primary Oracle DB server environments:
 - ▶ Public access
 - ▶ Intranet/Extranet
 - ▶ Development/Test
 - ▶ Financial Data Warehouse
- Over 60 Application Server Applications in the following environments
 - Oracle application server
 - Developer server
 - Reports server
 - Form server
 - Production, Intranet/Extranet, & Development environments

Lotus Domino

- About 250 Domino applications
- 3 Distinct operational environments
 - Production - public access
 - Intranet
 - Staging/Development/Test
- Domino 5.0 - Current release

ColdFusion

- More than 50 ColdFusion applications
- 3 Distinct operational environments
 - Production
 - Testing/staging
 - Development
- ColdFusion 5.0 - Current release

Current Environment

ESRI Map Objects & ARC/IMS

- More than 20 EPA mapping applications
- Production map service used inside & outside EPA
 - > 10 EPA web sites
 - > 50 non-EPA web sites

Current Environment

Other Software Tools and Products

- SAS/IntrNet
- COOL:Gen Case Tool

Summary

- Continued support for web, enterprise server, scientific, and email application development environments
- Continued exponential growth in web usage is expected for the next 3-5 years
- Continued increase in complexity of web applications and application environments
- Continued pressure to reduce costs and increase levels of service